

Application No. 10/024,633
Reply to Office Action dated August 27, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-23. (Canceled)

24. (Currently Amended) A weatherproof sheet suitable for use in a photocopier or laser printer and capable of fixedly and legibly bearing images printed directly thereon by means of the photocopier or laser printer, the weatherproof sheet comprising:

a cellulosic substrate having two substantially planar sides; and

a durable weatherproofing coating layer, impregnantly covering at least one of the two sides of the substrate, wherein the coating layer penetrates the surface of the at least one of the two sides of the substrate, and wherein the coating layer comprises a copolymer or mixture of copolymers derived from at least one styrene or styrenic monomer and at least one acrylic monomer, a wax, a filler to provide block resistance, a filler to provide tooth for printability and writability, a pigment, and an optical brightener; with the proviso that the coating layer comprises substantially no calcium carbonate filler and substantially no titanium dioxide pigment, such that the weatherproof sheet does not foul upon subsequent photocopying or laser printing of the same.

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25. (Original) The weatherproof sheet of claim 24 wherein the copolymer or mixture of copolymers is derived from monomers selected from the group consisting of styrene, butyl acrylate, 2-ethylhexyl acrylate, acrylic acid, and a mixture thereof.

Not known
does not
impregnantly
become

26. (Currently Amended) The weatherproof sheet of claim 24 wherein the mixture of copolymers is an acrylic or styrene acrylic emulsion.

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27. (Original) The weatherproof sheet of claim 24 wherein the weight of the coating layer ranges from about 3.7 grams to about 5.6 grams per square meter of cellulosic substrate surface area covered.

28. (Original) The weatherproof sheet of claim 24 wherein, based on the total weight of the coating layer and the coating layer having a moisture content of 5 percent by weight, the amount of the copolymer or mixture of copolymers ranges from about 30 percent to about 82 percent, and the amount of the wax ranges from about 1.5 percent to about 13 percent.

29. (Original) The weatherproof sheet of claim 24 wherein, based on the total weight of the coating layer and the coating layer having a moisture content of 5 percent by weight, the amount of the copolymer or mixture of copolymers is about 52.5 percent, and the amount of the wax is about 2.7 percent.

30. (Original) The weatherproof sheet of claim 24 wherein the filler to provide block resistance comprises barium sulfate, the filler to provide tooth for printability and writability comprises barium sulfate, and the pigment comprises barium sulfate.

31. (Original) The weatherproof sheet of claim 30 wherein the amount of the barium sulfate ranges from 0 percent to about 65 percent, based on the total weight of the coating layer and the coating layer having a moisture content of 5 percent by weight.

32. (Original) The weatherproof sheet of claim 30 wherein the amount of the barium sulfate is about 38 percent, based on the total weight of the coating layer and the coating layer having a moisture content of 5 percent by weight.

33. (Original) The weatherproof sheet of claim 24 wherein the filler to provide block resistance is clay, mica, aluminum trihydrate, or a mixture thereof.

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34. (Original) The weatherproof sheet of claim 24, further comprising an additive to enhance the wet strength of the cellulosic substrate.

35. (Original) The weatherproof sheet of claim 34 wherein the additive comprises polyamide.

36. (Original) The weatherproof sheet of claim 24 wherein the wax is paraffin wax, a polypropylene-wax mixture, a polyethylene-wax mixture, carnauba wax, microcrystalline wax, montan wax, a Fisher-Tropsch wax, beeswax, or a mixture thereof.

37. (Original) The weatherproof sheet of claim 24 wherein the coating layer further comprises a color tinting agent comprising an organic or inorganic pigment dispersed in an acrylic resin or other suitable media.

38. (Original) The weatherproof sheet of claim 24 wherein the coating layer further comprises water and wherein the moisture content associated therewith ranges from about 4 percent to about 7 percent by weight of the weatherproof sheet.

39. (Previously Presented) The weatherproof sheet of claim 24 wherein the coating layer is a compounded acrylic.

40. (Original) The weatherproof sheet of claim 24 wherein the cellulosic substrate is paper comprising cellulosic fibers.

41. (Original) The weatherproof sheet of claim 40 wherein the thickness of the paper ranges from .003 inches to .013 inches.

42. (Original) The weatherproof sheet of claim 40 wherein the thickness of the paper ranges from about .004 inches to about .006 inches.

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43. (Original) The weatherproof sheet of claim 42 having dimensions suitable for printing thereon using a photocopier or laser printer so as to produce an architectural or construction drawing.

44-65. (Canceled)